

Color, Taste and Odor Problems in Drinking Water

At times, water can have an unusual odor, taste or appearance. In most cases, these aesthetic characteristics do not pose a public health threat. Federal and state regulations require water systems to treat aesthetic problems only when customers request — and are willing to pay for improvements to the water system. Still, everyone wants their water to look, taste and smell good. There may be ways to improve the water aesthetics in your home.

The first step in solving a water quality problem is to identify whether it originates from the household plumbing or the water utility. One way to tell is to ask others in your neighborhood if they have a similar problem. Another is to contact your water utility or local health agency.

Below are typical concerns, their most common causes, and what you can do about them. If you are on a public water supply and you have any of these problems, or if they don't clear in the suggested time frame, contact your water utility. If you have a private well, contact your local health agency.

Discolored Water

If your water changes color suddenly – no matter what color it becomes – it could indicate a public health concern. Do not use the water and immediately contact your water utility or, if supplied by your own well, your local health agency. Something likely has disturbed the direction or rate of water flow in the water main, such as a water surge caused by a power outage or use of a fire hydrant.

Avoid running hot water if the cold water is discolored. This will prevent filling your hot water tank with discolored water. If you are washing clothes, you can minimize the potential for staining by stopping the washer while it is full and waiting until clear water is available to finish.

Green or blue water is usually caused by corrosion of copper plumbing. If corrosion is occurring, dripping water will leave a bluish-green stain on porcelain fixtures. Certain metals, such as copper, that get into drinking water from corrosion may pose a health concern. The problem could be in the home's piping or corrosive water from the utility. If you suspect corrosion, contact your water utility or a licensed plumber.

Black or dark brown water is usually due to manganese or pipe sediment and should clear up without further action when the sediment settles in the water main. Manganese does not pose a threat to human health. If it doesn't clear after a few minutes of flushing your cold water faucets and toilets, wait about an hour and try again. If it still isn't clear, contact your water utility.

Brown, red, orange or yellow water is usually caused by iron rust. Rusty water can be caused by galvanized iron, steel or cast iron pipes either in a home or business, or the water main. While unpleasant and potentially damaging to clothes and fixtures, iron in drinking water is not a human health concern.

Milky white or cloudy water is almost always caused by tiny air bubbles. If your water is white, fill a clear glass with water and set it on the counter. If the water starts to clear at the bottom of the glass first, the cloudy or white appearance is a natural occurrence. It is not a health threat and should clear in about five minutes.



Taste and Odor Problems

If the taste or odor occurs at every water faucet on the property, the cause could be the water supply. If it occurs only in certain faucets, the problem is with the fixture and pipe supplying those specific faucets. If the problem goes away after running the water for a few minutes, the problem is somewhere in your plumbing system.

Petroleum, gasoline, turpentine, fuel or solvent odor is rare and potentially serious. It is possible a leaking underground storage tank may be near your water supply. Do not use the water. Immediately contact your water utility or local health agency.

Metallic taste is usually due to minerals, such as iron or copper that can leach into water from pipes. Metals such as zinc and manganese are less common causes. Only a certified laboratory can analyze the water to determine if metals are present. Certain metals may have human health effects if consumed over long periods of time. If you are concerned, have your water analyzed by a certified lab, or contact your water utility.

Chlorine, chemical or medicinal taste or odor is usually caused by the addition of chlorine to the water by your public water system, or the interaction of chlorine with a build-up of organic matter in your plumbing system. This is not a health threat.

Sulfur or rotten egg taste or odor is most commonly caused by bacteria growing in your sink drain or water heater. But, in some cases, this smell is caused by naturally occurring hydrogen sulfide. To problem-solve the cause, put a small amount of water in a narrow glass, step away from the sink, swirl the water around inside the glass and smell it. If the water has no odor, then the likely problem is bacteria in the sink drain. If the water does have an odor, it could be your water heater. This occurs if the hot water has been unused for a long time, the heater has been turned off for a while, or the thermostat is set too low. Contact a licensed plumber to remedy this problem. If the drain or water heater have been ruled out, and the odor is definitely coming from the tap water, do not use the water. Contact your water utility or local health agency.

Moldy, musty, earthy, grassy or fishy taste or odor is commonly caused by bacteria growing in a sink drain or from organic matter such as plants, animals or bacteria that are naturally present in lakes and reservoirs. To problem-solve the cause, put a small amount of water in a narrow glass, step away from the sink, swirl the water around inside the glass and smell it. If the water has no odor, then the likely problem is the sink drain. If it does have an odor, the source could be organic matter in your drinking water. Although harmless, it can affect the taste and smell of your drinking water even at very low concentrations. The best way to reduce taste and odor is to run the faucet for several minutes, put some water in a container, and store it in the refrigerator. You may also consider installing a certified water filter. Salty taste is usually due to naturally occurring sodium, magnesium or potassium. If you live in a coastal area, sea water may be seeping into the fresh water supply. This could be a health threat. Contact your water system or local health agency.

Resources

If you decide to use a filtration or treatment device in your home, call the National Sanitation Foundation for a list of approved devices at 1-800-NSF-MARK or visit the Web site at http://www.nsf.org.

Call the state Department of Health's regional office nearest you:

Eastern region: (509) 456-3115 Northwest region (253) 395-6750 Southwest region (360) 664-0768

